

# SEQUENCE LISTING

<110> Okochi, Masayasu

<120> NOVEL Notch-ORIGIN POLYPEPTIDES AND BIOMARKERS AND REAGENTS USING THE SAME

<130> 10873.1604USWO\_H1857

<140> US 10/521,691

<141> 2003-07-17

<150> PCT/JP2003/009059

<151> 2003-03-17

<150> JP 2002-210040

<151> 2002-07-18

<160> 57

<170> PatentIn version 3.5

<210> 1

<211> 21

<212> PRT

<213> mouse

<400> 1

Val Lys Ser Glu Pro Val Glu Pro Pro Leu Pro Ser Gln Leu His Leu  
1 5 10 15

Met Tyr Val Ala Ala  
20

<210> 2

<211> 17

<212> PRT

<213> mouse

<400> 2

Val Lys Ser Glu Pro Val Glu Pro Pro Leu Pro Ser Gln Leu His Leu  
1 5 10 15

Met

<210> 3

<211> 18

<212> PRT

<213> mouse

<400> 3

Val Lys Ser Glu Pro Val Glu Pro Pro Leu Pro Ser Gln Leu His Leu  
1 5 10 15

Met Tyr

<210> 4  
<211> 20  
<212> PRT  
<213> mouse

<400> 4

Val Lys Ser Glu Pro Val Glu Pro Pro Leu Pro Ser Gln Leu His Leu  
1 5 10 15

Met Tyr Val Ala  
20

<210> 5  
<211> 22  
<212> PRT  
<213> mouse

<400> 5

Val Lys Ser Glu Pro Val Glu Pro Pro Leu Pro Ser Gln Leu His Leu  
1 5 10 15

Met Tyr Val Ala Ala Ala  
20

<210> 6  
<211> 23  
<212> PRT  
<213> mouse

<400> 6

Val Lys Ser Glu Pro Val Glu Pro Pro Leu Pro Ser Gln Leu His Leu  
1 5 10 15

Met Tyr Val Ala Ala Ala Ala  
20

<210> 7  
<211> 24  
<212> PRT  
<213> mouse

<400> 7

Val Lys Ser Glu Pro Val Glu Pro Pro Leu Pro Ser Gln Leu His Leu  
1 5 10 15

Met Tyr Val Ala Ala Ala Ala Phe  
20

<210> 8

<211> 25  
<212> PRT  
<213> mouse

<400> 8

Val Lys Ser Glu Pro Val Glu Pro Pro Leu Pro Ser Gln Leu His Leu  
1 5 10 15

Met Tyr Val Ala Ala Ala Ala Phe Val  
20 25

<210> 9  
<211> 26  
<212> PRT  
<213> mouse

<400> 9

Val Lys Ser Glu Pro Val Glu Pro Pro Leu Pro Ser Gln Leu His Leu  
1 5 10 15

Met Tyr Val Ala Ala Ala Ala Phe Val Leu  
20 25

<210> 10  
<211> 17  
<212> PRT  
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<400> 10

Val Gln Ser Glu Thr Val Glu Pro Pro Pro Pro Ala Gln Leu His Phe  
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Met

<210> 11  
<211> 18  
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<213> human

<400> 11

Val Gln Ser Glu Thr Val Glu Pro Pro Pro Pro Ala Gln Leu His Phe  
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Met Tyr

<210> 12  
<211> 20  
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<400> 12

Val Gln Ser Glu Thr Val Glu Pro Pro Pro Pro Ala Gln Leu His Phe  
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Met Tyr Val Ala  
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<210> 13

<211> 21

<212> PRT

<213> human

<400> 13

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Met Tyr Val Ala Ala  
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<210> 14

<211> 22

<212> PRT

<213> human

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Met Tyr Val Ala Ala Ala  
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<211> 23

<212> PRT

<213> human

<400> 15

Val Gln Ser Glu Thr Val Glu Pro Pro Pro Pro Ala Gln Leu His Phe  
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Met Tyr Val Ala Ala Ala Ala  
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<210> 16

<211> 24

<212> PRT

<213> human

<400> 16

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Met Tyr Val Ala Ala Ala Ala Phe  
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<210> 17  
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<400> 17

Val Gln Ser Glu Thr Val Glu Pro Pro Pro Pro Ala Gln Leu His Phe  
1 5 10 15

Met Tyr Val Ala Ala Ala Ala Phe Val  
20 25

<210> 18  
<211> 26  
<212> PRT  
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<400> 18

Val Gln Ser Glu Thr Val Glu Pro Pro Pro Pro Ala Gln Leu His Phe  
1 5 10 15

Met Tyr Val Ala Ala Ala Ala Phe Val Leu  
20 25

<210> 19  
<211> 57  
<212> DNA  
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<220>  
<223> Primer 1 which is derived from mouse Notch-1 gene for use in site  
specific mutagenesis.

<400> 19  
atcgtcgtcc ttgtagtctc tcaagcctct tgcgccgagc gcgggcagca gcgtttag 57

<210> 20  
<211> 54  
<212> DNA  
<213> Artificial

<220>  
<223> Primer 2 which is derived from mouse Notch-1 gene for use in site  
specific mutagenesis.

<400> 20  
gacaagatgg tgatgaagag tgagccggtg gagcctccgc tgccctcgca gctg 54

<210> 21  
<211> 32

<212> DNA  
 <213> Artificial  
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 <223> Primer 3 which is derived from mouse Notch-1 gene for use in site specific mutagenesis.  
 <400> 21  
 cctcgagct gcacatcatg tacgtggcag cg 32

<210> 22  
 <211> 32  
 <212> DNA  
 <213> Artificial  
 <220>  
 <223> Primer 4 which is derived from mouse Notch-1 gene for use in site specific mutagenesis.  
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<210> 23  
 <211> 70  
 <212> PRT  
 <213> Artificial  
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 <400> 23

Met Pro Arg Leu Leu Thr Pro Leu Leu Cys Leu Thr Leu Leu Pro Ala  
 1 5 10 15

Arg Ala Ala Arg Gly Leu Arg Asp Tyr Lys Asp Asp Asp Asp Lys Met  
 20 25 30

Val Met Lys Ser Glu Pro Val Glu Pro Pro Leu Pro Ser Gln Leu His  
 35 40 45

Leu Met Tyr Val Ala Ala Ala Ala Phe Val Leu Leu Phe Phe Val Gly  
 50 55 60

Cys Gly Val Leu Leu Ser  
 65 70

<210> 24  
 <211> 31  
 <212> PRT  
 <213> mouse

<400> 24  
 Leu Pro Ser Gln Leu His Leu Met Tyr Val Ala Ala Ala Ala Phe Val  
 1 5 10 15

Leu Leu Phe Phe Val Gly Cys Gly Val Leu Leu Ser Arg Lys Arg  
 20 25 30

<210> 25  
 <211> 31  
 <212> PRT  
 <213> human

<400> 25

Gly Ser Asn Lys Gly Ala Ile Ile Gly Leu Met Val Gly Gly Val Val  
 1 5 10 15

Ile Ala Thr Val Ile Val Ile Thr Leu Val Met Leu Lys Lys Lys  
 20 25 30

<210> 26  
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 <212> PRT  
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<220>  
 <223> Partial amino acid sequence of F-NEXT which is derived from mouse Notch-1 peptide and has FLAG sequence at N-terminal region.

<400> 26

Leu Arg Asp Tyr Lys Asp Asp Asp Asp Lys Met Val Met Lys Ser Glu  
 1 5 10 15

Pro Val Glu Pro Pro Leu Pro Ser Gln Leu His Leu Met Tyr Val Ala  
 20 25 30

Ala Ala Ala Phe Val Leu Leu Phe Phe Val Gly Cys Gly  
 35 40 45

<210> 27  
 <211> 38  
 <212> PRT  
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<220>  
 <223> Partial amino acid sequence of F-NEXT which is derived from mouse Notch-1 peptide and has FLAG sequence at N-terminal region.

<400> 27

Leu Arg Asp Tyr Lys Asp Asp Asp Asp Lys Met Val Met Lys Ser Glu  
 1 5 10 15

Pro Val Glu Pro Pro Leu Pro Ser Gln Leu His Leu Met Tyr Val Ala  
 20 25 30

Ala Ala Ala Phe Val Leu

35

<210> 28  
<211> 37  
<212> PRT  
<213> Artificial

<220>  
<223> Partial amino acid sequence of F-NEXT which is derived from mouse Notch-1 peptide and has FLAG sequence at N-terminal region.

<400> 28

Leu Arg Asp Tyr Lys Asp Asp Asp Asp Lys Met Val Met Lys Ser Glu  
1 5 10 15

Pro Val Glu Pro Pro Leu Pro Ser Gln Leu His Leu Met Tyr Val Ala  
20 25 30

Ala Ala Ala Phe Val  
35

<210> 29  
<211> 36  
<212> PRT  
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<220>  
<223> Partial amino acid sequence of F-NEXT which is derived from mouse Notch-1 peptide and has FLAG sequence at N-terminal region.

<400> 29

Leu Arg Asp Tyr Lys Asp Asp Asp Asp Lys Met Val Met Lys Ser Glu  
1 5 10 15

Pro Val Glu Pro Pro Leu Pro Ser Gln Leu His Leu Met Tyr Val Ala  
20 25 30

Ala Ala Ala Phe  
35

<210> 30  
<211> 35  
<212> PRT  
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<220>  
<223> Partial amino acid sequence of F-NEXT which is derived from mouse Notch-1 peptide and has FLAG sequence at N-terminal region.

<400> 30

Leu Arg Asp Tyr Lys Asp Asp Asp Asp Lys Met Val Met Lys Ser Glu  
1 5 10 15



Pro Val Glu Pro Pro Leu Pro Ser Gln Leu His Leu Met Tyr Val Ala  
 20 25 30

Ala Ala Ala  
 35

<210> 31  
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<220>  
 <223> Partial amino acid sequence of F-NEXT which is derived from mouse Notch-1 peptide and has FLAG sequence at N-terminal region.

<400> 31

Arg Gly Leu Arg Asp Tyr Lys Asp Asp Asp Asp Lys Met Val Met Lys  
 1 5 10 15

Ser Glu Pro Val Glu Pro Pro Leu Pro Ser Gln Leu His Leu Met Tyr  
 20 25 30

Val Ala Ala  
 35

<210> 32  
 <211> 33  
 <212> PRT  
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<220>  
 <223> Partial amino acid sequence of F-NEXT which is derived from mouse Notch-1 peptide and has FLAG sequence at N-terminal region.

<400> 32

Leu Arg Asp Tyr Lys Asp Asp Asp Asp Lys Met Val Met Lys Ser Glu  
 1 5 10 15

Pro Val Glu Pro Pro Leu Pro Ser Gln Leu His Leu Met Tyr Val Ala  
 20 25 30

Ala

<210> 33  
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 <212> PRT  
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<220>  
 <223> Partial amino acid sequence of F-NEXT which is derived from mouse Notch-1 peptide and has FLAG sequence at N-terminal region.

<400> 33

Asp Tyr Lys Asp Asp Asp Asp Lys Met Val Met Lys Ser Glu Pro Val  
1 5 10 15

Glu Pro Pro Leu Pro Ser Gln Leu His Leu Met Tyr Val Ala Ala  
20 25 30

<210> 34  
<211> 32  
<212> PRT  
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<220>  
<223> Partial amino acid sequence of F-NEXT which is derived from mouse Notch-1 peptide and has FLAG sequence at N-terminal region.

<400> 34

Leu Arg Asp Tyr Lys Asp Asp Asp Asp Lys Met Val Met Lys Ser Glu  
1 5 10 15

Pro Val Glu Pro Pro Leu Pro Ser Gln Leu His Leu Met Tyr Val Ala  
20 25 30

<210> 35  
<211> 30  
<212> PRT  
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<220>  
<223> Partial amino acid sequence of F-NEXT which is derived from mouse Notch-1 peptide and has FLAG sequence at N-terminal region.

<400> 35

Leu Arg Asp Tyr Lys Asp Asp Asp Asp Lys Met Val Met Lys Ser Glu  
1 5 10 15

Pro Val Glu Pro Pro Leu Pro Ser Gln Leu His Leu Met Tyr  
20 25 30

<210> 36  
<211> 29  
<212> PRT  
<213> Artificial

<220>  
<223> Partial amino acid sequence of F-NEXT which is derived from mouse Notch-1 peptide and has FLAG sequence at N-terminal region.

<400> 36

Leu Arg Asp Tyr Lys Asp Asp Asp Asp Lys Met Val Met Lys Ser Glu  
1 5 10 15

Pro Val Glu Pro Pro Leu Pro Ser Gln Leu His Leu Met  
20 25

<210> 37  
<211> 23  
<212> PRT  
<213> mouse

<400> 37

Leu His Leu Met Tyr Val Ala Ala Ala Ala Phe Val Leu Leu Phe Phe  
1 5 10 15

Val Gly Cys Gly Val Leu Leu  
20

<210> 38  
<211> 23  
<212> PRT  
<213> human

<400> 38

Leu His Phe Met Tyr Val Ala Ala Ala Ala Phe Val Leu Leu Phe Phe  
1 5 10 15

Val Gly Cys Gly Val Leu Leu  
20

<210> 39  
<211> 23  
<212> PRT  
<213> mouse

<400> 39

Leu Leu Tyr Leu Leu Ala Val Ala Val Val Ile Ile Leu Phe Phe Ile  
1 5 10 15

Leu Leu Gly Val Ile Met Ala  
20

<210> 40  
<211> 23  
<212> PRT  
<213> human

<400> 40

Leu Leu Tyr Leu Leu Ala Val Ala Val Val Ile Ile Leu Phe Ile Ile  
1 5 10 15

Leu Leu Gly Val Ile Met Ala  
20

<210> 41  
<211> 23

<212> PRT  
<213> mouse

<400> 41

Leu Leu Pro Leu Leu Val Ala Gly Ala Val Phe Leu Leu Ile Ile Phe  
1 5 10 15

Ile Leu Gly Val Met Val Ala  
20

<210> 42  
<211> 23  
<212> PRT  
<213> human

<400> 42

Leu Leu Pro Leu Leu Val Ala Gly Ala Val Leu Leu Leu Val Ile Leu  
1 5 10 15

Val Leu Gly Val Met Val Ala  
20

<210> 43  
<211> 23  
<212> PRT  
<213> mouse

<400> 43

Ile Leu Cys Ser Pro Val Val Gly Val Leu Leu Leu Ala Leu Gly Ala  
1 5 10 15

Leu Leu Val Leu Gln Leu Ile  
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<210> 44  
<211> 23  
<212> PRT  
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<400> 44

Val Leu Cys Ser Pro Val Ala Gly Val Ile Leu Leu Ala Leu Gly Ala  
1 5 10 15

Leu Leu Val Leu Gln Leu Ile  
20

<210> 45  
<211> 24  
<212> PRT  
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<400> 45

Gly Ala Ile Ile Gly Leu Met Val Gly Gly Val Val Ile Ala Thr Val  
1 5 10 15

Ile Val Ile Thr Leu Val Met Leu  
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<210> 46  
<211> 8  
<212> PRT  
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<220>  
<223> Partial amino acid sequence of transmembrane region of F-NEXT  
which is derived from mouse Notch-1 peptide.

<400> 46

Leu His Leu Met Tyr Val Ala Ala  
1 5

<210> 47  
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<220>  
<223> Partial amino acid sequence of transmembrane region of F-NEXT  
which is derived from mouse Notch-1 peptide.

<400> 47

Leu His Leu Met Tyr Val Ala Ala Ala Ala  
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<210> 48  
<211> 11  
<212> PRT  
<213> Artificial

<220>  
<223> Partial amino acid sequence of transmembrane region of F-NEXT  
which is derived from mouse Notch-1 peptide.

<400> 48

Leu His Leu Met Tyr Val Ala Ala Ala Ala Phe  
1 5 10

<210> 49  
<211> 12  
<212> PRT  
<213> Artificial

<220>  
<223> Partial amino acid sequence of transmembrane region of F-NEXT  
which is derived from mouse Notch-1 peptide.

<400> 49

Leu His Leu Met Tyr Val Ala Ala Ala Ala Phe Val  
1 5 10

<210> 50  
<211> 28  
<212> PRT  
<213> Artificial

<220>  
<223> Partial amino acid sequence of transmembrane region of F-NEXT  
which is derived from mouse Notch-1 peptide.

<400> 50

Leu His Leu Met Tyr Val Ala Ala Ala Ala Phe Val Leu Leu Phe Phe  
1 5 10 15

Val Gly Cys Gly Val Leu Leu Ser Arg Lys Arg Arg  
20 25

<210> 51  
<211> 24  
<212> PRT  
<213> Artificial

<220>  
<223> Partial amino acid sequence of transmembrane region of F-NEXT  
which is derived from mouse Notch-1 peptide.

<400> 51

Leu His Leu Met Tyr Val Ala Ala Ala Ala Phe Val Leu Leu Phe Phe  
1 5 10 15

Val Gly Cys Gly Val Leu Leu Ser  
20

<210> 52  
<211> 24  
<212> PRT  
<213> Artificial

<220>  
<223> Partial amino acid sequence of transmembrane region of F-NEXT  
which is derived from mouse Notch-1 peptide.

<400> 52

Leu His Leu Met Tyr Val Ala Ala Ala Ala Phe Val Leu Leu Phe Phe  
1 5 10 15

Val Gly Cys Gly Val Leu Leu Ser  
20

<210> 53  
<211> 24

<212> PRT  
<213> Artificial

<220>  
<223> Partial amino acid sequence of transmembrane region of  
F-NEXT(V1744G) which is derived from mouse Notch-1 peptide.

<400> 53

Leu His Leu Met Tyr Val Ala Ala Ala Ala Phe Val Leu Leu Phe Phe  
1 5 10 15

Val Gly Cys Gly Gly Leu Leu Ser  
20

<210> 54  
<211> 24  
<212> PRT  
<213> Artificial

<220>  
<223> Partial amino acid sequence of transmembrane region of  
F-NEXT(V1744L) which is derived from mouse Notch-1 peptide.

<400> 54

Leu His Leu Met Tyr Val Ala Ala Ala Ala Phe Val Leu Leu Phe Phe  
1 5 10 15

Val Gly Cys Gly Leu Leu Leu Ser  
20

<210> 55  
<211> 24  
<212> PRT  
<213> Artificial

<220>  
<223> Partial amino acid sequence of transmembrane region of F-NEXT  
which is derived from mouse Notch-1 peptide.

<400> 55

Leu His Leu Met Tyr Val Ala Ala Ala Ala Phe Val Leu Leu Phe Phe  
1 5 10 15

Val Gly Cys Gly Val Leu Leu Ser  
20

<210> 56  
<211> 24  
<212> PRT  
<213> Artificial

<220>  
<223> Partial amino acid sequence of transmembrane region of  
F-NEXT(mutant) which is derived from mouse Notch-1 peptide.

<400> 56

Leu His Leu Met Tyr Val Gly Gly Gly Gly Phe Val Leu Leu Phe Phe  
1 5 10 15

Val Gly Cys Gly Val Leu Leu Ser  
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<210> 57

<211> 24

<212> PRT

<213> Artificial

<220>

<223> Partial amino acid sequence of transmembrane region of  
F-NEXT(mutant) which is derived from mouse Notch-1 peptide.

<400> 57

Leu His Leu Met Tyr Val Leu Leu Leu Leu Phe Val Leu Leu Phe Phe  
1 5 10 15

Val Gly Cys Gly Val Leu Leu Ser  
20